

Grace Zhou

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EDUCATION

University of Virginia

B.A. in Computer Science

Charlottesville, VA

Expected May 2029

- **GPA:** 4.0 / 4.0 | **Relevant Coursework:** Foundations of Commerce, Calculus III, Programming, Economics

EXPERIENCE

Mainland Student Network

Software Developer

Charlottesville, VA

Sep 2025 – Present

- Engineered and maintained full-stack organization website; implemented responsive designs with cross-platform compatibility, increasing member sign-ups by 45% through improved access to program resources and event registrations
- Developed automated mentor-mentee matching system processing 200+ profiles; designed matching algorithm based on academic interests, career goals, and background criteria, achieving 95%+ satisfaction rate and reducing pairing time by 80%
- Implemented content management system for directory updates and event coordination; integrated PostgreSQL database of alumni contacts and student records, enabling real-time outreach tracking and streamlined communication workflows

Project Code – FitBite

Backend Developer

Charlottesville, VA

Sep 2025 – Present

- Developed convolutional neural network using PyTorch and NumPy for food image recognition; trained model on 10,000+ labeled food images across 50+ categories achieving 97%+ classification accuracy for nutritional analysis
- Engineered backend infrastructure with Python and SQL for user authentication, meal logging, and data storage; designed RESTful API endpoints supporting image upload, model inference, and calorie calculation with <200ms response time
- Implemented data preprocessing pipeline for image standardization and augmentation; built testing framework to evaluate model performance across edge cases (low lighting, partial items, multi-dish images), reducing misclassification rate by 30%

Darcy & Roy Press – Global Economy, Finance, and Humanities Research

Blockchain Researcher

New York, NY

Oct 2024 – Jan 2025

- Analyzed Bitcoin blockchain data (Pandas, Matplotlib) to track transaction patterns, wallet behaviors, and on-chain metrics; processed 500K+ transactions to identify adoption trends and volatility patterns across peer-to-peer payment systems
- Built data visualization dashboard aggregating blockchain analytics (price cycles, supply dynamics, network activity on Dune); automated data pipeline pulling API data to generate real-time reports on institutional adoption barriers and regulatory risks
- Researched smart contract implementations and DeFi protocol mechanics; evaluated architecture of 20+ blockchain M&A cases in FinTech sector, assessing scalability constraints and infrastructure requirements for enterprise coordination

PROJECTS & EXTRACURRICULAR EXPERIENCE

Wharton Capital Holdings - Aprôche

Software Development & Analytics Intern

San Francisco, CA

Oct 2025 – Present

- Wrote Python scripts (Selenium, BeautifulSoup) to scrape TikTok and Instagram creator profiles; parsed engagement rates, follower demographics, and content categories from 500+ accounts to build prospect lists for brand partnership outreach
- Designed internal tracking application (React, Node.js) to manage influencer outreach pipeline, integrating search, filtering, and real-time status updates across 150+ creator profiles; deployed on Vercel with JWT auth and role-based access controls
- Cleaned and standardized scraped profile data across CSV records for pipeline integration; compiled dashboard insights into weekly briefs with Google and Wharton MBA leadership on brand growth strategy and consumer marketing initiatives

Wharton Global Investment Competition

Equity Research & Quantitative Strategy Lead

Philadelphia, PA

Sep 2023 – Dec 2023

- Built Python script to automate screening of 50+ public companies using financial metrics (ROIC, EV/EBIT, ESG scores); analyzed balance sheet data to construct optimized portfolio aligned with sustainable alpha and downside protection
- Programmed trading model using TensorFlow and Pandas; implemented backtesting framework integrating MACD, RSI, and custom "Entrepre-ESG" factor achieving 20%+ simulated alpha and 15% lower drawdown versus benchmark portfolio
- Conducted Monte Carlo simulations and stress testing across 1,000+ market scenarios; documented model assumptions, validation framework, and risk controls in report presented by 5-member team competing amongst 9,000+ participants

TECHNICAL SKILLS

Languages: Python, JavaScript, C++, HTML/CSS, SQL, R

Technologies: Git, Node.js, React, RESTful API, PostgreSQL, NumPy, Pandas, PyTorch, TensorFlow, Selenium